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10/520,681	01/07/2005	Ralf Neuhaus	2002P03767WOUS	5198
<div>7590 Siemens Corporation Intellectual Property Department 170 Wood Avenue South Iselin, NJ 08830</div>			<div>EXAMINER PATEL, ASHOKKUMAR B</div>	
			<div>ART UNIT 2154</div>	<div>PAPER NUMBER</div>
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/520,681

Applicant(s)

NEUHAUS ET AL.

Examiner

Ashok B. Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 1-7 and 10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8,9 and 11-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 26 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-26 are subject to examination. Claims 1-7 and 10 are cancelled. Claim 26 is subjected to the restriction requirement.

Response to Arguments

2. Applicant's arguments filed 08/13/2007 have been fully considered but they are not persuasive for the following reasons:

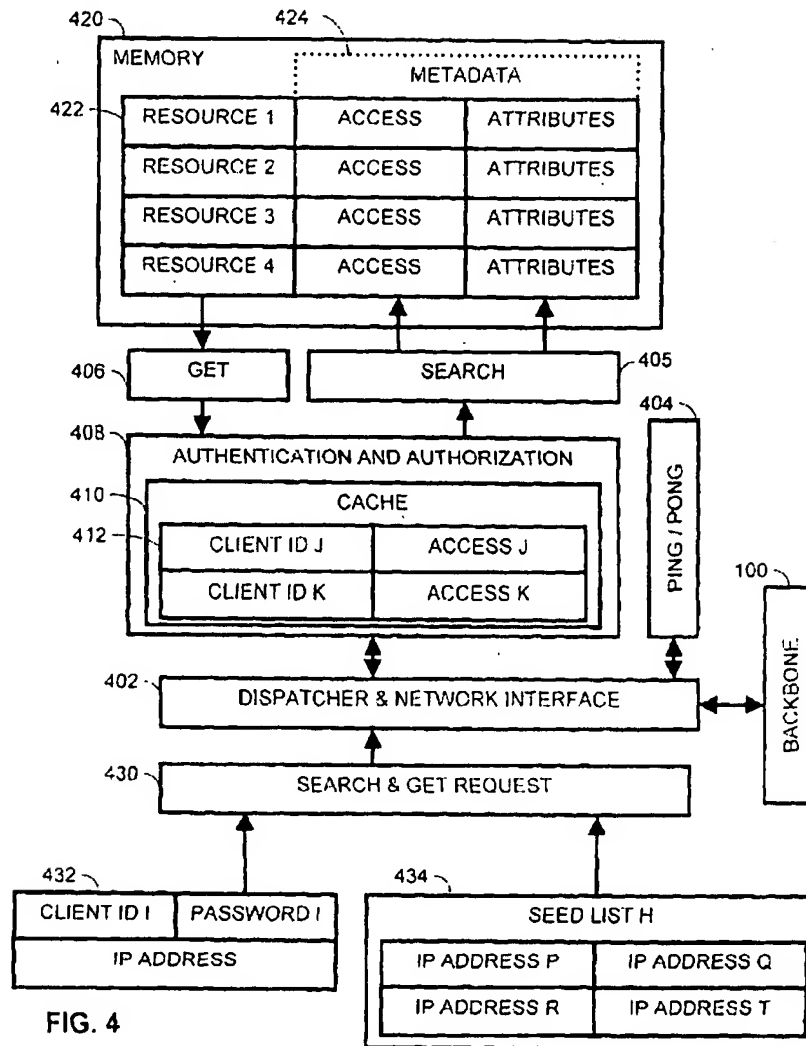
Response to rejections under 35 USC 102(e):

Applicant's argument:

"Unlike Applicants' invention, Goodman does not have a client and server in the same communications component. Instead, Goodman has a central server 102 and separate remote clients 106-120. Although the clients 106-120 perform a file storage and retrieval functions, they do not perform network traffic and control functions, which are only performed by the central server. Thus, Goodman provides a type of hybrid system as described in his background section col. 1 lines 58-62 and col. 2 lines 44-59. It has neither a centrally controlled architecture, nor a pure P2P architecture (col. 2, lines 60-67 and col. 4, lines 18-24)."

Examiner's response:

First of all, Examiner would like to state that these arguments are presented along with the amendments made to the claim limitations seemingly driving towards changing the scope of the claim. As such, Examiner will address the arguments accordingly.



Goodman teaches at **col. 6, line 49-51**, "FIG. 4 shows a block diagram of a client of the P2P network and system operating in accordance with a preferred embodiment of the present invention.", **col.7, line 61-col. 8, line 17**, The client of FIG. 4 may also initiate SEARCH and GET requests. When a SEARCH request is initiated, the terms of the search are received typically from an operator of the client. The SEARCH and GET request processor 430 packages the terms of the search along with the credentials of the client 432 including a client ID and password as well as its IP

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address. The search request is then communicated to clients having an IP address included in its seed list 434, seed list 434 having IP addresses received from server 102. Credentials 432 are used in the aforementioned authentication and authorization processes. If a particular resource in a particular client is desired as a result of the search, then the SEARCH and GET request processor 430 packages the resource identification along with credential information into a GET request and sends the GET request to the corresponding client.

As a further part of the P2P search propagation process, a SEARCH request processed by search process 405 is also communicated to other addresses included in the seed list 434. This provides a peer-to-peer network search dispatcher for forwarding a resource search to client address of the seed list. However, the SEARCH request may not be propagated if there is a timeout or if there is a failure of the authentication process.”

Additionally, Goodman teaches at col. 4, line 46-60 under the heading “Characteristics of the Preferred Embodiment Include: ”, “Enhanced client database--Each client maintains a database of resources that it shares. The database will preferably not only contain names and characteristics of the files, but also user-defined metadata describing the files.

Reduced Network Activity--Unlike a pure P2P network, clients need not ping the other clients continuously. Instead, a client maintains awareness of other connected clients by downloading the list of IP addresses from the server periodically. Each client

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sends a handshake to each of the clients in the list received. If an acknowledgement is received from another client, that client is added to the original client's list.

Pure P2P Protocol Based--Like most of the packet communications, search and search response is accomplished among clients using a protocol similar to a pure P2P protocol."

Thus, Goodman does have a client and server in the same communications component.

Applicant's argument stating "the clients 106-120 perform a file storage and retrieval functions, they do not perform network traffic and control functions, which are only performed by the central server." is irrelevant since the claim limitations does not indicate "performing network traffic and control functions."

Goodman teaches "Pure P2P Protocol Based--Like most of the packet communications, search and search response is accomplished among clients using a protocol similar to a pure P2P protocol." as indicated above.

Applicant's argument:

Examiner himself notes this distinction on page 8-9 of the office action, in which he quotes an excerpt from Goodman col. 4, lines 50-64: "Reduced Network Activity -- Unlike a pure P2P network, clients need not ping the other clients continuously. Instead, a client maintains awareness of other connected clients by downloading the list of IP addresses from the server periodically."

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"Examiner appears to have misinterpreted Goodman col. 5, lines 39-46 as referring to client operations. These lines refer to IP address maintenance by the server, not the client. See the previous sentence (col. 5, lines 37-39)."

Examiner's response:

Again, Examiner would like to state that these arguments are presented along with the amendments made to the claim limitations seemingly driving towards changing the scope of the claim. As such, Examiner will address the arguments accordingly.

Goodman teaches at col. 4, line 46-60 under the heading "Characteristics of the Preferred Embodiment Include: ", "Enhanced client database--Each client maintains a database of resources that it shares. The database will preferably not only contain names and characteristics of the files, but also user-defined metadata describing the files.

Reduced Network Activity--Unlike a pure P2P network, clients need not ping the other clients continuously. Instead, a client maintains awareness of other connected clients by downloading the list of IP addresses from the server periodically. Each client sends a handshake to each of the clients in the list received. If an acknowledgement is received from another client, that client is added to the original client's list.

Pure P2P Protocol Based--Like most of the packet communications, search and search response is accomplished among clients using a protocol similar to a pure P2P protocol."

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Goodman teaches "Pure P2P Protocol Based--Like most of the packet communications, search and search response is accomplished among clients using a protocol similar to a pure P2P protocol." as indicated above.

Goodman teaches "Each client sends a handshake to each of the clients in the list received. If an acknowledgement is received from another client, that client is added to the original client's list." Thus, Goodman teaches that "IP address maintenance is done by the client."

Response to rejections under 35 USC 103(a):

Applicant's argument:

"The proposed addition of server state information of Dutta and/or the usage cost information of Bowman to the teachings of Goodman does not change the distinction in architecture between Goodman and Applicant as argued above and as recited in the present independent claims. Furthermore Goodman explicitly teaches away from P2P architectures as discussed above. Thus, motivation is lacking to convert Goodman into a P2P architecture without a central address server as in Applicant's invention."

Examiner's response:

Dutta teaches in Abstract, "The response provided by the first peer node, i.e. either a copy of the specified file or the alternate node list, can be determined based on an operational condition of the first peer node, e.g., whether or not the first peer node is experiencing an overload condition." (by using a state information).

It would have been obvious for the reasons stated by Dutta at para. [0010] and [0011], "However, prior to requesting the download of a file from a particular node, a

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user does not have any information on the current load that is being experienced by the particular node. Although the user may know the connection speed of the node, which may lead the user to assume that the download time from the node will be inversely proportional to the connection speed of the node, the node may be experiencing a heavy load with many simultaneous connections. Hence, after requesting to download a file from the node, the user may discover that the download of the file proceeds more slowly than desired, presumably because the node is experiencing a heavier load than the user may deem appropriate. [0011] Therefore, it would be advantageous to provide a method and system for improving response characteristics within a peer-to-peer data sharing network. It would be particularly advantageous to allow a node to indicate an alternate manner for fulfilling a download request if the node determines that its response characteristics would be inadequate if it attempted to fulfill a new download request."

Bowman teaches in Abstract, "The invention disclosed is a path optimizer for Peer to Peer (P2P) networks. Large amounts of P2P file exchanges increase the costs to maintain a network. Network service providers typically pay for the amount of data they exchange with other network service providers. The present invention examines P2P messages between and within networks and provides a cost efficient path to handle each P2P message."

It would have been obvious for the reasons stated by Bowman at para. [0003] and [0004], "0003] P2P has led to increased financial pressure for network service providers. A network service provider is an entity that maintains a group of computers

or nodes that form a network. Examples of networks include but are not limited to: a network controlled by an Internet Service Provider (ISP), a corporate network or a university network. [0004] A network service provider typically must pay a fee for the traffic to and from their network."

Election/Restrictions

3. Newly submitted claim 26 directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

A. Restriction to one of the following inventions is required under 35 U.S.C. 121:

Group I) Claims 8-25 are drawn to A communication network comprising:

a plurality of communication components, at least some of which comprise both client and server functionalities, at least some of the client functionalities including a search function that ascertains network addresses of others of the communication components that allow the server functionalities of the others to be used; a retrieval mechanism in said at least some of the client functionalities that obtains information about the server functionalities of said other communication components; and wherein the server functionalities provide usable services in the communication network, classified in Class 709, subclasses 226 and 243.

Group II) Claims 26 are drawn to a method of communication within a network, comprising: connecting a plurality of communication components to a first network, at least some of the communication components comprising both client and server functionalities, some of the communication components comprising gateways, each

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gateway comprising communications channels to a second network, and each gateway comprising a server functionality that maintains information on usage and available communications channels of the gateway; a given one of said at least some of the communication components querying others of the communication components and storing information received from responding others of the communication components as to what server functionalities are provided by each of the responding others; the given communication component making the stored information available on the first network as responses to inquiring others of the communication components; the given communication component determining a shortest communications route from the given communication component to a subscriber on the second network by means of response propagation delays from a selection of responding gateways on the network; the given communication component retrieving the information on usage and available communications channels from the selection of responding gateways, and the given communication component choosing a best gateway through which to communicate with the called subscriber by sorting the selection of responding gateways first in order of greatest availability, and second in order of shortest route, classified in Class 370; subclasses 351, 401, 431, 464.

B. The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are unrelated. In the instant case the different inventions are represented by claims 8-25 and claim 26 respectively. Claims 8-25 a plurality of communication components, at least some of which comprise both client and server

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functionalities, at least some of the client functionalities including a search function that ascertains network addresses of others of the communication components that allow the server functionalities of the others to be used; a retrieval mechanism in said at least some of the client functionalities that obtains information about the server functionalities of said other communication components; and wherein the server functionalities provide usable services in the communication network, lacking particulars of claims 26, as stated above. Therefore, inventions I and II have different functions, different modes of operation and they have different effects.

C. These inventions are distinct for the reasons given above, and the search required for each Group is different and not co-extensive for examination purpose. For example, the searches for two inventions would not be co-extensive because these groups would require different searches on PTO's classification class and subclass as following:

(a) the Group I search (claims 8-25) would require use of search Class 709, subclasses 226 and 243. (not require for the invention II).

(b) the Group II search (claim 26) would require use of search Class 370, subclasses 401, 431, 464. (not require for the invention I).

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 26 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless-

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 8-10, 14-18, 22-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Goodman et al. (hereinafter Goodman) (US 7, 130, 921 B2).

Referring to claim 8,

Goodman teaches a communication network comprising:

a plurality of communication components, at least some of which comprise both client and server functionalities, at least some of the client functionalities including a search function that ascertains network addresses of others of the communication components that allow the server functionalities of the others to be used; (Goodman teaches at **col. 6, line 49-51**, "FIG. 4 shows a block diagram of a client of the P2P network and system operating in accordance with a preferred embodiment of the present invention.", **col.7, line 61-col. 8, line 17**, The client of FIG. 4 may also initiate SEARCH and GET requests. When a SEARCH request is initiated, the terms of the search are received typically from an operator of the client. The SEARCH and GET request processor 430 packages the terms of the search along with the credentials of the client 432 including a client ID and password as well as its IP address. The search

request is then communicated to clients having an IP address included in its seed list 434, seed list 434 having IP addresses received from server 102. Credentials 432 are used in the aforementioned authentication and authorization processes. If a particular resource in a particular client is desired as a result of the search, then the SEARCH and GET request processor 430 packages the resource identification along with credential information into a GET request and sends the GET request to the corresponding client.

As a further part of the P2P search propagation process, a SEARCH request processed by search process 405 is also communicated to other addresses included in the seed list 434. This provides a peer-to-peer network search dispatcher for forwarding a resource search to client address of the seed list. (at least some of the client functionalities including a search function that ascertains network addresses of others of the communication components that allow the server functionalities of the others to be used)

Goodman teaches at col. 4, line 46-60 under the heading "Characteristics of the Preferred Embodiment Include: ", "Enhanced client database--Each client maintains a database of resources that it shares. The database will preferably not only contain names and characteristics of the files, but also user-defined metadata describing the files.

Reduced Network Activity--Unlike a pure P2P network, clients need not ping the other clients continuously. Instead, a client maintains awareness of other connected clients by downloading the list of IP addresses from the server periodically. Each client

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sends a handshake to each of the clients in the list received. If an acknowledgement is received from another client, that client is added to the original client's list (at least some of the client functionalities including a search function that ascertains network addresses of others of the communication components that allow the server functionalities of the others to be used.)

Pure P2P Protocol Based--Like most of the packet communications, search and search response is accomplished among clients using a protocol similar to a pure P2P protocol."

Thus, Goodman does have a client and server in the same communications component.

Goodman teaches "Each client sends a handshake to each of the clients in the list received. If an acknowledgement is received from another client, that client is added to the original client's list."

Thus, Goodman teaches that "IP address maintenance is done by the client." and search and search response is accomplished among clients using a protocol similar to a pure P2P protocol.")

a retrieval mechanism in said at least some of the client functionalities that obtains information about the server functionalities of said other communication components; (Goodman teaches at col. 4, line 46-60 under the heading "Characteristics of the Preferred Embodiment Include: ", "Enhanced client database--Each client maintains a database of resources that it shares. The database

will preferably not only contain names and characteristics of the files, but also user-defined metadata describing the files.

Reduced Network Activity--Unlike a pure P2P network, clients need not ping the other clients continuously. Instead, a client maintains awareness of other connected clients by downloading the list of IP addresses from the server periodically. Each client sends a handshake to each of the clients in the list received. If an acknowledgement is received from another client, that client is added to the original client's list.

Pure P2P Protocol Based--Like most of the packet communications, search and search response is accomplished among clients using a protocol similar to a pure P2P protocol.) and wherein the server functionalities provide usable services in the communication network (col. 6, line 23-38)

Referring to claim 9,

Goodman teaches the communication network as claimed in Claim 8, wherein the communication network provides for a self-administration on the basis of the information ascertained by the search functions (col. 3, line 28-36, "Another embodiment of the present invention provides a client in a peer-to-peer network having a server and a multiplicity of clients having searchable resources, each of the multiplicity of clients having a unique client address. The client comprises a seed list receiver for receiving and storing a seed list of client addresses from the server, and a peer-to-peer network search dispatcher for forwarding a resource search request to client addresses of the seed list.", col. 4, line 50-60, col. 4, line 50-60, "Reduced Network Activity--Unlike a pure P2P network, clients need not ping the other clients continuously. Instead, a

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client maintains awareness of other connected clients by downloading the list of IP addresses from the server periodically. Each client sends a handshake to each of the clients in the list received. If an acknowledgement is received from another client, that client is added to the original client's list.")

Referring to claim 14,

Goodman teaches the communication network as claimed in Claim 8, wherein the client functionality is designed to retrieve an authorization before using a server functionality (Fig. 4, element 408)

Referring to claim 15,

Goodman teaches the communication network as claimed in Claim 14, wherein at least one server functionality is provided for managing the authorization (Fig. 4, element 408)

Referring to claim 16,

Claim 16 is a claim to a method that is implemented in a communication network of claim 8. Therefore claim 16 is rejected for the reasons set forth for claim 8.

Referring to claim 17,

Claim 17 is a claim to a method that is implemented in a communication network of claim 9. Therefore claim 17 is rejected for the reasons set forth for claim 9.

Referring to claim 18,

Claim 18 is a claim to a method that is implemented in a communication network of claim 10. Therefore claim 18 is rejected for the reasons set forth for claim 10.

Referring to claim 22,

Claim 22 is a claim to a method that is implemented in a communication network of claim 14. Therefore claim 22 is rejected for the reasons set forth for claim 14.

Referring to claim 23,

Claim 23 is a claim to a method that is implemented in a communication network of claim 15. Therefore claim 23 is rejected for the reasons set forth for claim 15.

Referring to claim 24,

Goodman teaches the method as claimed in Claim 16, wherein the current address of all of the communication components are ascertained (col. 4, line 50-60, "Reduced Network Activity--Unlike a pure P2P network, clients need not ping the other clients continuously. Instead, a client maintains awareness of other connected clients by downloading the list of IP addresses from the server periodically. Each client sends a handshake to each of the clients in the list received. If an acknowledgement is received from another client, that client is added to the original client's list.".)

Referring to claim 25,

Goodman teaches the method as claimed in Claim 16, wherein the server functionality of all of the communication components are retrieved (col. 4, line 46-49, "Enhanced client database--Each client maintains a database of resources that it shares. The database will preferably not only contain names and characteristics of the files, but also user-defined metadata describing the files.", col.7, line 61-col. 8, line 17,)

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 11, 12, 19 and 20 are rejected under 35 U.S.C. 103(a) as being Unpatentable over Goodman et al. (hereinafter Goodman) (US 7, 130, 921 B2) in view of Dutta et al. (hereinafter Dutta) (US 2003/0050966 A1)

Referring to claim 11,

Goodman teaches the communication network as claimed in Claim 8, wherein a server functionality is selected for use when a plurality of server functionalities are present. (col.7, line 61-col. 8, line 17, The client of FIG. 4 may also initiate SEARCH and GET requests. When a SEARCH request is initiated, the terms of the search are received typically from an operator of the client. The SEARCH and GET request processor 430 packages the terms of the search along with the credentials of the client 432 including a client ID and password as well as its IP address. The search request is then communicated to clients having an IP address included in its seed list 434, seed list 434 having IP addresses received from server 102. Credentials 432 are used in the aforementioned authentication and authorization processes. If a particular resource in a particular client is desired as a result of the search, then the SEARCH and GET request processor 430 packages the resource identification along with credential information into a GET request and sends the GET request to the corresponding client.

As a further part of the P2P search propagation process, a SEARCH request processed by search process 405 is also communicated to other addresses

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included in the seed list 434. This provides a peer-to-peer network search dispatcher for forwarding a resource search to client address of the seed list. (at least some of the client functionalities including a search function that ascertains network addresses of others of the communication components that allow the server functionalities of the others to be used.”)

Goodman fails to teach “by using a state information”.

Dutta teaches in Abstract, “The response provided by the first peer node, i.e. either a copy of the specified file or the alternate node list, can be determined based on an operational condition of the first peer node, e.g., whether or not the first peer node is experiencing an overload condition.”(by using a state information).

Therefore it would have been an obvious to one of an ordinary skill in art, having the teachings of Goodman and Dutta in front of him at the time of invention was made, to incorporate teachings of Dutta into the communication network of Goodman such that the state of the communication component is known before selecting the server functionality in an environment of multiple server functionalities like that of Goodman.

It would have been obvious for the reasons stated by Dutta at para. [0010] and [0011], “However, prior to requesting the download of a file from a particular node, a user does not have any information on the current load that is being experienced by the particular node. Although the user may know the connection speed of the node, which may lead the user to assume that the download time from the node will be inversely proportional to the connection speed of the node, the node may be experiencing a heavy load with many simultaneous connections. Hence, after requesting to download

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a file from the node, the user may discover that the download of the file proceeds more slowly than desired, presumably because the node is experiencing a heavier load than the user may deem appropriate. [0011] Therefore, it would be advantageous to provide a method and system for improving response characteristics within a peer-to-peer data sharing network. It would be particularly advantageous to allow a node to indicate an alternate manner for fulfilling a download request if the node determines that its response characteristics would be inadequate if it attempted to fulfill a new download request."

Referring to claim 12,

Keeping in mind the teachings of Goodman stated in claims 8 and 11 above, Goodman fails to teach the communication network as claimed in Claim 11, wherein the state information comprises a current utilization level of the server functionalities that are present a plurality of times.

Dutta teaches in Abstract, "The response provided by the first peer node, i.e. either a copy of the specified file or the alternate node list, can be determined based on an operational condition of the first peer node, e.g., whether or not the first peer node is experiencing an overload condition."(a current utilization level of the server functionalities that are present a plurality of times.).

Therefore it would have been an obvious to one of an ordinary skill in art, having the teachings of Goodman and Dutta in front of him at the time of invention was made, to incorporate teachings of Dutta into the communication network of Goodman such that a current utilization level of the server functionalities that are present a plurality of times

of the communication component is known before selecting the server functionality in an environment of multiple server functionalities like that of Goodman.

It would have been obvious for the reasons stated by Dutta at para. [0010] and [0011], "However, prior to requesting the download of a file from a particular node, a user does not have any information on the current load that is being experienced by the particular node. Although the user may know the connection speed of the node, which may lead the user to assume that the download time from the node will be inversely proportional to the connection speed of the node, the node may be experiencing a heavy load with many simultaneous connections. Hence, after requesting to download a file from the node, the user may discover that the download of the file proceeds more slowly than desired, presumably because the node is experiencing a heavier load than the user may deem appropriate. [0011] Therefore, it would be advantageous to provide a method and system for improving response characteristics within a peer-to-peer data sharing network. It would be particularly advantageous to allow a node to indicate an alternate manner for fulfilling a download request if the node determines that its response characteristics would be inadequate if it attempted to fulfill a new download request."

Referring to claim 19,

Claim 19 is a claim to a method that is implemented in a communication network of claim 11. Therefore claim 19 is rejected for the reasons set forth for claim 11.

Referring to claim 20,

Claim 20 is a claim to a method that is implemented in a communication network of claim 12. Therefore claim 20 is rejected for the reasons set forth for claim 12.

10. Claims 13 and 21 are rejected under 35 U.S.C. 103(a) as being Unpatentable over Goodman et al. (hereinafter Goodman) (US 7, 130, 921 B2) in view of Bowman (US 2003/0208621 A1)

Referring to claim 13,

Keeping in mind the teachings of Goodman stated in claims 8 and 11 above, Goodman fails to teach the communication network as claimed in Claim 11, wherein the state information comprises the use cost of the server functionalities that are present a plurality of times.

Bowman teaches in Abstract, "The invention disclosed is a path optimizer for Peer to Peer (P2P) networks. Large amounts of P2P file exchanges increase the costs to maintain a network. Network service providers typically pay for the amount of data they exchange with other network service providers. The present invention examines P2P messages between and within networks and provides a cost efficient path to handle each P2P message."

Therefore it would have been an obvious to one of an ordinary skill in art, having the teachings of Goodman and Bowman in front of him at the time of invention was made, to incorporate teachings of Bowman into the communication network of Goodman such that the use cost of the server functionalities are known before selecting

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the server functionality in an environment of multiple server functionalities like that of Goodman.

It would have been obvious for the reasons stated by Bowman at para. [0003] and [0004], "[0003] P2P has led to increased financial pressure for network service providers. A network service provider is an entity that maintains a group of computers or nodes that form a network. Examples of networks include but are not limited to: a network controlled by an Internet Service Provider (ISP), a corporate network or a university network. [0004] A network service provider typically must pay a fee for the traffic to and from their network."

Referring to claim 21,

Claim 21 is a claim to a method that is implemented in a communication network of claim 13. Therefore claim 21 is rejected for the reasons set forth for claim 13

Conclusion

Examiner's note: Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

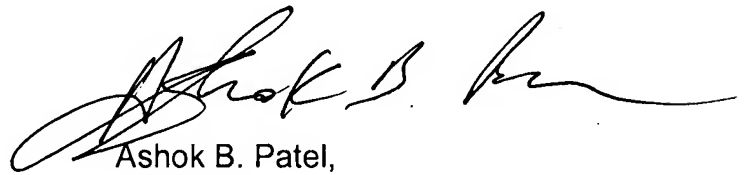
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ashok B. Patel whose telephone number is (571) 272-3972. The examiner can normally be reached on 6:30 am-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan A. Flynn can be reached on (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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A handwritten signature in black ink, appearing to read 'Ashok B. Patel', with a long horizontal flourish extending to the right.

Ashok B. Patel,
Examiner
AU 2154